

WHAT IS CLAIMED IS:

1. A silver alloy composition comprising about 90%-95.5% silver and about 0.5%-6% platinum by weight, said platinum effective to provide the silver alloy with greater light reflectivity and tarnish resistance as compared to a sterling silver alloy that does not incorporate platinum.

2. The silver alloy composition of Claim 1 further comprising about 0.7% to 3.2% copper by weight.

3. The silver alloy composition of Claim 2 further comprising about 1%-5% by weight of one or more metal additives selected from the group consisting of zinc, gallium, silicon, boron, indium, tin, germanium and mixtures thereof.

4. The silver alloy composition of Claim 1, comprising about 92.5% silver and about 1 % platinum by weight.

5. The silver alloy composition of Claim 1, comprising about 92.5% silver and about 3.5% platinum by weight.

6. The silver alloy composition of Claim 1, comprising about 92.5% silver and about 5% platinum by weight.

7. A jewelry item comprising the silver alloy composition of Claim 1, said jewelry item is selected from the group consisting of bracelet, ring, necklace, brooch, cuff links, pin, and watch.

8. A flatware item comprising the silver alloy composition of Claim 1, said flatware item is selected from the group consisting of knife, fork, spoon, tray, pitcher and plate.

9. A silver alloy comprising silver and platinum, with silver being the predominant component by weight relative to the total weight of the alloy, wherein said alloy is formed into a configuration suitable for jewelry and flatware making.

10. The silver alloy of Claim 9, comprising about 92.5% or more silver by weight.

11. The silver alloy of Claim 10, comprising about 0.5% or more platinum by weight.

12. The silver alloy of Claim 9, comprising about 3.5% or less copper by weight.

13. The alloy of Claim 9, further comprising about 0.3% gallium.

14. The alloy of Claim 9 is formed into a configuration selected from the group consisting of grains, sheets, and tubes.

15. A metal alloy having a composition comprising about 90.5-95.5% silver by weight, about 0.5-6% platinum by weight, about 0.7-4% copper by weight, about 0.1-2% gallium by weight.

16. The metal alloy of Claim 15, further comprising about 0-3% tin by weight, about 0-2.5% germanium by weight, about 0.5-4% zinc by weight, about 0-0.2% silicon by weight, about 0-0.3% boron by weight, and about 0-1.5% indium by weight.

17. The metal alloy of Claim 15, wherein said platinum refines the grain structure of the alloy so as to provide the metal alloy with a brighter surface finish as compared to a sterling silver alloy that does not include platinum.

18. The metal alloy of Claim 15, having a Rockwell-15T Hardness value of between about 69-70.

19. A method of manufacturing a silver-platinum alloy, with silver being the predominant component of the alloy, comprising:

combining silver, platinum, gallium and additives to form a mixture, said gallium facilitates alloying of silver and platinum at a temperature lower than the respective melting temperatures of silver and platinum; and

heating said mixture to melt the components of the mixture and incorporate said components into an alloy; and

forming said molten alloy into a desired shape and configuration for use in jewelry manufacturing.

20. The method of Claim 19, wherein combining silver, platinum, gallium and additives comprises:

placing a first layer comprising silver in a container made of a material that is capable of withstanding high temperatures;

placing a second layer comprising zinc and gallium on said first layer;

sprinkling a flux material over said second layer;

covering said zinc and gallium in said second layer with silver;

placing a third layer comprising silicon in said container; and

placing a fourth layer comprising platinum on said third layer.

21. The method of Claim 20, wherein said mixture is heated to a temperature of between about 2300°F to 2350°F for between about 5 to 8 minutes to incorporate the metals in the mixture.

22. The method of Claim 20, wherein said molten alloy is poured into water to form beads of grain.

23. The method of Claim 20, wherein said molten alloy is poured into an ingot mold.

24. The method of Claim 20, wherein said molten alloy is formed into a flat sheet.

25. The method of Claim 20, wherein said molten alloy is formed into a tube.